

## CLAIMS

1. A metal mold, comprising:
  - a cavity having a predetermined internal shape;
  - a molding material injection path communicated with the cavity via a gate for supplying a metered fluid molding material to the cavity; and a valve pin disposed within the molding material injection path so as to be inserted into and pulled out from the gate,wherein the cavity is formed with a cylindrical mold cavity and a columnar core to be coaxially inserted into and pulled out from the mold cavity, and the gate for injecting the molding material is formed in alignment with the center axis of the mold cavity.
2. The metal mold according to claim 1, wherein the mold cavity forms the outer surface of a cylinder and the core is for forming the cylinder inner surface.
3. The metal mold according to claim 1, wherein the molding material is a kneaded material of a sintering powder and a resin binder.
4. The metal mold according to claim 1, wherein the mold

cavity forms the outer surface of the cylinder and the core is for forming the cylinder inner surface, and the molding material is a kneaded material of a sintering powder and a resin binder.

5. A formed body molding method, comprising the steps of:

(a) injecting a metered molding material from the molding material supply side into a cavity via a gate to fill the cavity therewith,

(b) after filling the cavity, applying and maintaining a predetermined pressure to the filled material within the cavity,

(c) after completing the pressure applying and maintaining step and after gate cutoff, returning a surplus molding material remaining at the gate portion to the molding material supply side,

(c) cooling the molding material within the cavity to solidify into a molding, and

(d) taking out the molding,

wherein the cavity includes a cylindrical mold cavity and a columnar core to be coaxially inserted into and pulled out from the mold cavity, and the gate for injecting the molding material is formed in alignment with the center axis of the

mold cavity, a metered resin is injected from the front end side of the core to fill the core therewith.

6. The formed body molding method according to claim 5, wherein the mold cavity forms the outer surface of a cylinder and the core is for forming the cylinder inner surface.

7. The formed body molding method according to claim 5, wherein the molding material is a kneaded material of a sintering powder and a resin binder.

8. The formed body molding method according to claim 5, wherein the mold cavity forms the outer surface of the cylinder and the core is for forming the cylinder inner surface, and the molding material is a kneaded material of a sintering powder and a resin binder.